

PATENT APPLICATION

Docket Number: 037003-0280705
Client Reference: 1995-30-0233CP3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of ANDERSON et al. Group Art Unit: 1644

Application No.: 10/073,138 Examiner: Phillip Gambel

Filed: February 13, 2002 Confirmation No.: 7969

For: IDENTIFICATION OF UNIQUE BINDING INTERACTIONS BETWEEN CERTAIN
ANTIBODIES AND THE HUMAN B7.1 AND B7.2 CO-STIMULATORY ANTIGENS

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. The references were cited by the applicant or examiner during the prosecution of the parent application, U.S. Application No. 09/383,916, filed on August 26, 1999. Thus, copies of the references listed in the attached PTO-1449 are not attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed before the mailing date of the first official action on the merits in the present application. No certification or fee is required.

Respectfully submitted,



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Atty. Dkt. No.	M#	Client Ref.
037003-0280705	1995-30-0233CP3	
Applicant	ANDERSON, et al.	
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Group Art Unit:	1644	

**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**

Date: February 6, 2004

Page 1 of 3

U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
AR	4,816,397	03/1989	Boss, et al.	435	68	
BR	4,816,567	03/1989	Cabilly, et al	530	387	
CR	5,116,964	05/1992	Capon, et al.	536	27	
DR	5,844,095	12/1998	Linsley, et al			
ER	5,885,579	03/1999	Linsley, et al.			
FR	6,051,228	04/2000	Aruffo, et al.			
GR	6,162,432	12/2000	Waliner, Et al			

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IR	0 173 494 A2	03/1986	EP	Morrison, et al.				
JR	0 239 400 B1	08/1994	EP	Winter, et al.				
KR	0 194 276 A1	03/1986	EP	Neuberger, et al				
LR	0 451 216 B1	10/1991	EP	Queen, et al.				
MR	0 555 880 A2, A3	08/1993	EP	Aruffo, et al.				
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PR	WO 92/06193	04/1992	WO	Gorman, et al.				
QR	WO 93/09812	05/1993	WO	Lederman, et al				
RR	WO 94/28912	12/1994	WO	Thompson, et al.				
SR	WO 95/06481	03/1995	WO	Noelle, et al.				
TR	WO 95/06666	03/1995	WO	Noelle, et al.				
UR	WO 98/19706	05/1998	WO	Anderson, et al.				

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

VR	Armitage, et al., "Molecular and biological characterization of a murine," <i>Nature</i> , 1992, 357 80-82.
WR	Ben-Nun, et al., "The rapid isolation of clonable antigen-specific T lymphocyte lines capable of mediating autoimmune encephalomyelitis," <i>Eur. J. Immunol.</i> , 1981, 11, 195-199
XR	Blazar, et al., "Infusion of anti-B7.1 (CD80) and anti-B7 2 (CD86) monoclonal antibodies inhibits murine graft-versus-host disease lethality in part via direct effects on CD4+ and CD8+ T cells," <i>J. Immunol.</i> , 1996, 157 3250-3259
YR	Capon, et al., "Designing CD4 immunoadhesins for AIDS therapy," <i>Nature</i> , 1989, 337, 525-531.
ZR	Cohen, J., New protein steals the show as 'costimulator' of T cells, <i>Science</i> , (1993) 262 844-845.

AAR	Dautigny, et al., "Molecular cloning and nucleotide sequence of a cDNA clone coding for rat brain myelin proteolipid," <i>FEBS Lett.</i> , 1985, 188(1):33-36.
BBR	Delabie, et al., "The B7/BB1 antigen is expressed by Reed-Sternberg cells of Hodgkin's disease and contributes to the stimulating capacity of Hodgkin's disease-derived cell lines," <i>Blood</i> , 1993, 82:2845-52.
CCR	Dillman, et al., "Antibodies as cytotoxic therapy," <i>J Clin. Oncol.</i> , 1994, 12:1497-1515.
DDR	Durie, et al., "The role of CD40 and its ligand (gp39) in peripheral and central tolerance and its contribution to autoimmune disease," <i>Research in Immunology</i> , 1994, 145(3), 200-205 & 244-249.
EER	Durie, et al., "Prevention of collagen-induced arthritis with an antibody to gp39, the ligand for CD40," <i>Science</i> , 1993, 261:1328-1330.
FFR	Falini, et al., "Response of refractory Hodgkin's disease to monoclonal anti-CD30 immunotoxin," <i>Lancet</i> , 1992, 339:1195-1196.
GGR	Freeman, et al., "Uncovering of functional alternative CTLA-4 counter-receptor in B7-deficient mice," <i>Science</i> , 1993, 262:907-909.
HHR	Freeman, et al., "Cloning of B7-2: a CTLA-4 counter-receptor that costimulates human T cell proliferation," <i>Science</i> , 1993, 262:909-911.
IIR	Gerritse, et al., "CD40-CD40 ligand interactions in experimental allergic encephalomyelitis and multiple sclerosis," <i>Proc. Natl. Acad. Sci. USA</i> , 1996, 93:2499-2504.
JJR	Gottlieb, et al., "Results of a single-dose dose-escalating trial of an anti-B7.1 antibody (IDE-114) in patients with psoriasis," <i>J. Invest. Dermatol.</i> , 2000, 114:840, Abstract No. 546.
KKR	Gottlieb, et al., "Clinical and histologic response to single-dose treatment of moderate to severe psoriasis with an anti-CD80 monoclonal antibody," <i>J. Am. Acad. Dermatol.</i> , 2002, 47:693-700.
LLR	Guinan, et al., "Pivotal role of the B7:CD28 pathway in transplantation tolerance and tumor immunity," <i>Blood</i> , 1994, 84:3261-3282.
MMR	Hafler, et al., "The potential of restricted T cell recognition of myelin basic protein epitopes in the therapy of multiple sclerosis," <i>Ann. NY Acad. Sci.</i> , 1991, 636:251-265.
NNR	Hariharan, et al., "Therapeutic activity of IDEC-114 (anti-CD80) and rituximab (Rituxan®) in B-cell lymphoma," <i>Blood</i> , 2001, 98 (11 part 1), p. 608a (abstract).
OOR	Hathcock, et al., "Identification of an alternative CTLA-4 ligand costimulatory for T cell activation," <i>Science</i> , 1993, 262:905-907.
PPR	Hollenbaugh, et al., "The human T cell antigen gp39, a member of the TNF gene family, is a ligand for the CD40 receptor: expression of a soluble form of gp39 with B cell co-stimulatory activity," <i>EMBO J.</i> , 1992, 11(12):4313-4321.
QQR	Kahan, "Immunosuppressive therapy," <i>Curr. Opin. Immunol.</i> , 1992, 4:553-560.
RRR	Karpus, et al., "CD4+ suppressor cells differentially affect the production of IFN- γ by effector cells of experimental autoimmune encephalomyelitis," <i>J. Immunol.</i> , 1989, 143:3492-3497.
SSR	Kuntz, "Structure-based strategies for drug design and discovery," <i>Science</i> , 1992, 257:1078-82.
TTR	Laman, et al., "The role of gp39 (CD40 ligand) in EAE and MS," <i>Journal of Neuroimmunology</i> , 1994, 54(1-2):175.
UUR	Lederman, et al., "Identification of a novel surface protein on activated CD4+ T cells that induces contact-dependent B cell differentiation (Help)," <i>J. Exp. Med.</i> , 1992, 175:1091-1101.
VVR	Lider, et al., "Suppression of experimental autoimmune encephalomyelitis by oral administration of myelin basic protein," <i>J. Immunol.</i> , 1989, 142:748-752.
WWR	Linsley, et al., "The role of the CD28 receptor during T cell responses to antigen," <i>Ann. Rev. Immunol.</i> , 1993, 11:191-212.
XXR	Liu, et al., "Blockade of CD28/CTLA-4-B7 co-stimulatory pathway in colitic SCID mice," <i>Digestive Disease Week</i> , May 21-24, 2000, p. A58, Abstract No. 3000.
YYR	McCafferty, et al., "Phage antibodies: filamentous phage displaying antibody variable domains," <i>Nature</i> , 1990, 348:552-554.
ZZR	Miller, et al., "Antigen-driven bystander suppression after oral administration of antigens," <i>J. Exp. Med.</i> , 1991, 174:791-798.
AAAR	Mokhtarian, et al., "Adoptive transfer of myelin basic protein-sensitized T cells produces chronic relapsing demyelinating disease in mice," <i>Nature</i> , 1984, 309:356-358.
BBBBR	Morrison, et al., "Chimeric human antibody molecules: mouse antigen-binding domains with human constant region domains," <i>Proc. Natl. Acad. Sci. USA</i> , 1985, 81:6851-6855.
CCCR	Munro, et al., "In vivo expression of the B7 costimulatory molecule by subsets of antigen-presenting cells and the malignant cells of Hodgkin's disease," <i>Blood</i> , 1994, 83:793-798.
DDDR	Ngo, et al., in Merz, Jr. and Le Grand (eds), <u>The Protein Folding Problem and Tertiary Structure Prediction</u> , Birkhauser, Boston, MA, pp. 433 & 492-495.

EEER	Nickoloff, et al. "T lymphocytes in skin lesions of psoriasis and mycosis fungoides express B7-1: a ligand for CD28." <i>Blood</i> , 1994, 83:2580-2586.
FFFR	Noelle, et al., "A 39-kDa protein on activated helper T cells binds CD40 and transduces the signal for cognate activation of B cells." <i>Proc. Natl. Acad. Sci. USA</i> , 1992, 89:6550-6554.
GGGR	Olsson, et al., "Human-human monoclonal antibody-producing hybridomas. technical aspects." <i>Meth. Enzymol.</i> , 1982 92 3-17.
HHHR	Perni, et al., "Opposing effects of CTLA4-Ig and anti-CD80 (B7-1) plus anti-CD86 (B7-2) on experimental allergic encephalomyelitis." <i>J. Neuroimmunol.</i> , 1996, 65:31-39.
IIIR	Pesoa, et al., Regulation of experimental allergic encephalomyelitis Part 5. Role of the recipient in suppressor cell induction. <i>J. Neuroimmunol.</i> , 1984, 7 131-135.
JJJR	Pettinelli, et al., "Adoptive transfer of experimental allergic encephalomyelitis in SJL/J mice after in vitro activation of lymph node cells by myelin basic protein: requirement for Lyt 1 ⁺ 2 ⁺ T lymphocytes." <i>J. Immunol.</i> , 1979, 127:1420-1423.
KKKR	Skolnick, et al., "From genes to protein structure and function: novel applications of computational approaches in the genomic era." <i>Trends in Biotechnology</i> , 2000, 18:34-9
LLLRL	Sobel, et al., "Acute experimental allergic encephalomyelitis in SJL/J mice induced by a synthetic peptide of myelin proteolipid protein." <i>J. Neuropathol. Exp. Neurol.</i> , 1990, 49(5):468-479.
MMMR	Stamenkovic, et al., "A B-lymphocyte activation molecule related to the nerve growth factor receptor and induced by cytokines in carcinomas." <i>EMBO J.</i> , 1989, 8(5):1403-1410.
NNNR	Suvas, et al., "Distinct role of CD80 and CD86 in the regulation of the activation of B cell and B cell lymphoma." <i>J. Biol. Chem.</i> , 2002 277:7766-7775.
OOOR	Takeda, et al., "Construction of chimaeric processed immunoglobulin genes containing mouse variable and human constant region sequences." <i>Nature</i> , 1985, 314(4):452-454.
PPPR	Teng, et al., "Construction and testing of mouse-human heteromyelomas for human monoclonal antibody production." <i>Proc. Natl. Acad. Sci. USA</i> , 1983, 80:7308-7312.
QQQR	Tuohy, et al., "Identification of an encephalitogenic determinant of myelin proteolipid protein for SJL mice." <i>J. Immunol.</i> , 1989, 142:1523-1527.
RRRR	Van der Veen, et al., "The adoptive transfer of chronic relapsing experimental allergic encephalomyelitis with lymph node cells sensitized to myelin proteolipid protein." <i>J. Neuroimmunol.</i> , 1989, 21:183-191.
SSSR	Ward, et al., "Binding activities of a repertoire of single immunoglobulin variable domains secreted from <i>Escherichia coli</i> ." <i>Nature</i> , 1989, 341:544-546.
TTTR	Ward, et al., "Blocking of adhesion molecules in vivo as anti-inflammatory therapy." <i>Ther. Immunol.</i> , 1994, 1:165-171.
UUUR	Yi-qun, et al., "Differential requirements for co-stimulatory signals from B7 family members by resting versus recently activated memory T cells towards soluble recall antigens." <i>Int. Immunol.</i> , 1996, 8 37-44.

Examiner

Date Considered:

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.